

ELECTRICAL GENIUS

KELLY OF MASSACHUSETTS, THE
"ORIGINAL 60,000 VOLTMAN."

Served Apprenticeship Under Wizard
Edison, But Is Little Known to
the Public—Has Perfected
Eighty Patents.

Boston.—Outside of men with knowl-
edge of electrical affairs and achieve-
ments, it is not generally known that
there is living in Pittsfield, Mass., an
inventor and engineer who has won
high distinction in developing the
great electrical industry of this coun-
try.

John Forrest Kelly, the "original 60,
000 voltman," is a friend of the wizard



Edison and served an apprenticeship
under him. He has perfected 80 pa-
tents, has received a degree of doctor
of philosophy and his name is sug-
gestive of progressive methods in elec-
trical machinery and station de-
sign.

John Forrest Kelly, son of Jeremiah
and Kate (Forrest) Kelly, was born
near Carrick-on-Suir, Ireland, March
8, 1859. Both of his parents were
teachers, and several of his ancestors
and their collateral relatives were
stably successful in various profes-
sional lines.

Kelly was educated in Stevens
Institute of Technology in Hoboken,
N. J., and received the degree of B. S.
in 1878 and that of Ph.D. in 1881.

His first occupation in life was as
assistant to Thomas A. Edison in
Wenlo Park laboratory, his work re-
sulting principally to the chemistry of
the earths.

Later in 1879 he became electrical en-
gineer of the New York branch of the
Western Electrical Company. This
was at the time when the telephone
was being generally introduced, and
dynamoes were first being ap-
plied to telegraphic purposes. In the
action and installment of instru-
ments for telegraphy and telephony
such measuring instruments as
then known, Mr. Kelly received
much training.

Later he became laboratory assist-
ant to Edward Watson, then chief elec-
trician of an electric lighting company
in New York, and with the exception
of a year Mr. Kelly continued his
association with Mr. Watson until
1886. Some of the most impor-
tant work, such as the research which
led to the discovery of high resist-
ance alloys of very low or even nega-
tive temperature coefficients, was sub-
stantially carried out by Mr. Kelly.
His discoveries were followed by
the successful Mr. Watson as
electrician of the United States
Electric Lighting Company, which in-
creased to the Westinghouse inter-

January, 1892, Mr. Kelly joined
the Berkshire county electrical in-
spector, William Stanley of Great Har-
ington, in experimental work. The
work done by Mr. Kelly in this con-

nection gave great impetus to the al-
ternating current business.

Mr. Kelly's inventive work is par-
tially represented by 80 patents. The
art of building transformers and gen-
erators of alternating currents was
revolutionized and Mr. Kelly and his
colleagues were the first to put poly-
phase motors into actual commercial
service. That success naturally led to
long distance transmission work, and
the first long-distance transmission
plants in California (indeed the first
in the world) were undertaken on
Mr. Kelly's recommendation and ad-
vice.

Most of Mr. Kelly's work has been
of too technical a character to com-
mand popular appreciation—such, for
instance, as that of improving the
quality of steel. He was the first one
to make an hysteretically stable steel,
a matter of more importance than
the comparatively spectacular trans-
mission work.

Mr. Kelly is a member of the Amer-
ican Institute of Electrical Engineers,
the American Electrochem society, the
American Academy of Political Sci-
ence, the American Economic associa-
tion, American Statistical society,
American Irish Historical society, En-
gineers' club, all of the United States,
and also has membership in the In-
stitution of Electrical Engineers, So-
ciety of Arts and Irish Texts society
of England, and the Societe Interna-
tionale des Electriciens of France.

What is Heaven.
"If I could be out of physical pain,"
said a lifelong invalid, "I would ask
no other heaven." "If I could be in a
place where I might know that my
husband never could be killed on the
train!" cried one of the gentle "wor-
riers" whose capacity for suffering is
neither understood nor respected by
the sanguine. "If I could take
my children to a world where every
time I hear a croupy cough my heart
did not stand still with terror," urged
another, "that would be heaven for
me." The mulatto girl who burst into
joyful tears at first sight of a marble
bust of herself, "because it was
white," had a glimpse of her heaven
before its time.

"Heaven must be like any other
form of happiness, only 'more so,'" said
a thoughtful man. "And the
conditions of happiness are three: a
clean conscience, something to do,
and some one to love."—Elizabeth
Stuart Phelps, in Harper's Weekly.

Need Thorough Cooking.
Raw pullet, raw veal and raw fish
make the graveyard fat. This is hun-
dreds of years old. A New York
caterer, perhaps the most efficient in
the city, said: "There are three im-
portant articles of food that must, un-
der no circumstances, be served un-
derdone. They are fish, chicken and
veal. By chicken I mean all poultry
of a domestic nature. All game birds
should be rare. You want to be a lit-
tle careful about lamb, too; give it
plenty of cooking."

Averted an Excuse.
"I noticed," remarked the piano
stool to the parlor lamp, "that you
started to smoke last night when Miss
Yerner was entertaining Mr. Tim-
mid."

"Yes," replied the lamp, "I saw
she was just waiting for an excuse
to turn me down."

Foreign and Domestic.
His Wife (reading)—I see they had
a bread riot in Spain recently.
Her Husband—Yes; and we'll have
one at home soon if there isn't an im-
provement in your biscuits.—Chicago
Daily News.

Annual Tallow Supply.
According to calculations by one of
the best-informed candle manufac-
turers in Chicago, over 130,000,000
pounds of tallow are used every year
for candle-making in America.

New Telegraph Company Formed.
A company has been formed for in-
troducing wireless and long-distance
telephone service between Mexico
and Vera Cruz.

SANDY ATE THE "PARRITCH."
But He Had to Play Mean Trick on
Himself to Do It.

An old gentleman in a village not
far from Glasgow breakfasted every
morning on porridge, and, in order to
save fuel, cooked a whole week's sup-
ply every Saturday. One Friday morn-
ing the stuff seemed very cold and
very salt, and he felt he must abandon
the struggle to eat it. But his stub-
born nature forbade any such thought.
So he fetched the whisky from the
cupboard, poured out a glass and
placed it before him on the table.

"Now, Sandy," said he, "if ye eat
that parritch ye'll hae that whisky, an'
if ye don't ye won't."

He stuck again at the last spoon-
ful, but keeping his eye steadily on
the glass of whisky, he made a bold,
brave effort, and got it down. Then
he slowly and carefully poured back
the whisky into the bottle with a
groat grin, as he said to himself:
"Sandy, my lad, I did ye thot time, ye
could fule!"

Returned Him.
A man returned to his native village
after having emigrated to Kansas
some 20 years previous. He asked
about different villagers he had
known in the old days, and finally of
the town drunkard of his time.
"Oh, he's dead," was the reply.
"Well, well; dead and buried is he?"
"Nope; they didn't bury him."
"Didn't bury him!" exclaimed the
former resident. "Well, then, what
did they do with him?"
"Oh, they just poured him back in
the jug."

Good Work Has Slow Growth.
Bancroft spent 26 years on his his-
tory and Webster 36 on his dictionary.
'Tis the same with the great inven-
tions. It took years of study and ex-
periment to perfect them. Everything
must have a foundation, otherwise it
cannot stand, and the more solid the
foundation the safer is the structure.

Through Struggle to Repose.
Struggle and anguish have their
place in every genuine life, but they
are the stages through which it ad-
vances to a strength which is full of
repose.—Mable.

FRIENDS HELP.
St. Paul Park Incident.

"After drinking coffee for breakfast
I always felt languid and dull, having
no ambition to get to my morning
duties. Then in about an hour or so
a weak, nervous derangement of the
heart and stomach would come over
me with such force I would frequently
have to lie down."

"At other times I had severe head-
aches; stomach finally became af-
fected and digestion so impaired that
I had serious chronic dyspepsia and
constipation. A lady, for many years
State President of the W. C. T. U.,
told me she had been greatly benefited
by quitting coffee and using Postum
Food Coffee; she was troubled for
years with asthma. She said it was
no cross to quit coffee when she
found she could have as delicious an
article as Postum."

"Another lady who had been trou-
bled with chronic dyspepsia for years,
found immediate relief on ceasing cof-
fee and beginning Postum twice a
day. She was wholly cured. Still
another friend told me that Postum
Food Coffee was a Godsend to her, her
heart trouble having been relieved
after leaving off coffee and taking on
Postum."

"So many such cases came to my
notice that I concluded coffee was
the cause of my trouble and I quit and
took up Postum. I am more than
pleased to say that my days of trouble
have disappeared. I am well and
happy." "There's a Reason." Read
"The Road to Wellville," in pkgs.

Ever read the above letter? A new
one appears from time to time. They
are genuine, true, and full of human
interest.



Amy (after the tiff)—I shall return
you everything you have given me.
George (cheerfully)—All right, then.
Suppose we start at the kisses first.

It Cures While You Walk.
Allen's Foot-Ease is a certain cure for
hot, sweating, callous, and swollen, aching
feet. Sold by all Druggists. Price 25c. Don't
accept any substitute. Trial package FREE.
Address Allen S. Olmsted, Le Roy, N. Y.

The best teacher of duties that still
lie dim to us is the practice of those
we see and have at hand.—Geikie.

NATURE AND A WOMAN'S WORK



LYDIA E. PINKHAM
Nature and a woman's work com-
bined have produced the grandest
remedy for woman's ills that the
world has ever known.

In the good old-fashioned days of
our grandmothers they relied upon
the roots and herbs of the field to
cure disease and mitigate suffering.

The Indians on our Western
Plains to-day can produce roots and
herbs for every ailment, and cure
diseases that baffle the most skilled
physicians who have spent years in
the study of drugs.

From the roots and herbs of the
field Lydia E. Pinkham more than
thirty years ago gave to the women
of the world a remedy for their pe-
culiar ills, more potent and effica-
cious than any combination of drugs.

Lydia E. Pinkham's Vegetable
Compound is now recognized as the
standard remedy for woman's ills.

Mrs. Bertha Muff, of 515 N.C. St.,
Louisiana, Mo., writes:

"Complete restoration to health
means so much to me that for the sake
of other suffering women I am willing
to make my troubles public."

"For twelve years I had been suffer-
ing with the worst forms of female ills.
During that time I had eleven different
physicians without help. No tongue
can tell what I suffered, and at times I
could hardly walk. About two years
ago I wrote Mrs. Pinkham for advice.
I followed it, and can truly say that
Lydia E. Pinkham's Vegetable Com-
pound and Mrs. Pinkham's advice re-
stored health and strength. It is
worth mountains of gold to suffering
women."

What Lydia E. Pinkham's Vege-
table Compound did for Mrs. Muff,
it will do for other suffering women.

AGENTS
wanted to sell the origi-
nal \$1.00 box of Native
Herbs for 25 cents. Be-
ware of imitations. The
Patent Office has recently decided a trade-
mark cancellation case in my favor, cancelling
a registered trademark on "Native Herbs,"
which was issued to my competitors, on the
ground that they were not entitled to such
trade-mark. For sample and terms and the
Patent Office's decision, write
P. E. MELROSE, Columbus, Ohio.